

Our ref: 21-080_002
Your ref: GBC/2023/095114
Application No: 20230367

17th August 2023

[REDACTED]
Flood and Water Management
Invicta House
Maidstone
Kent
ME14 1XX

Dear Emily,

RE: MILTON MOUNT HALL, OLD ROAD EAST, GRAVESEND, KENT DA12 1NQ

Further to your letter dated 16th August 2023 please see our response below to the three items raised.

- 1. We appreciate that the Engineering layout (drawing number 21-080_C01, revision H, dated 24.07.23) has been updated as well as the hydraulic calculations provided within the report to reflect the infiltration rates obtained within the soakaway locations. However we note that there are discrepancies between the invert levels for the Geocellular Soakaways, now not matching those within the hydraulic calculations. We would seek for the invert levels on the drawing to be identical to those within the model.*

We have reviewed both the Engineering layout and the Microdrainage calculations and believe there may be a slight confusion in the values within the Microdrainage calculation and the drawing down to the different terminology used. Within the Microdrainage calculations, the base of tank level for the geocellular structure is referred to as the invert level. Therefore we confirm that the Microdrainage calculations are identical to the information shown on the Engineering layout 21-080_C01 Rev H.

We have included the Microdrainage manhole schedule for clarity.

	Invert Level – Microdrainage Calculations	Base of Tank - Engineering layout 21-080_C01 Rev H
SA1	27.53	27.53
SA2	26.69	26.69

- 2. Further to this we note that the half drain time has not been calculated as the structure is too full. Whilst not a requirement for those in association with the 1:100 year event to achieve half drained within 24 hours, KCC would expect for the time to be as close to this as possible. If it is not possible to achieve a half drain time of under 24 hours, KCC requests a further 10 year event to be run consecutively to the 1:100 in order to demonstrate the operational functionality of the features and possible issues of exceedance.*

We have extended the simulation run time to show the half drain times. The previously submitted simulations were run with the default run times of each duration. These have now been extended to calculate the required half drain time. All half drain times are less than 24 hours for all modelled events. Please see the attached Microdrainage calculations.

3. *With regards to the infiltration testing we seek to confirm that this was undertaken within the locations of the soakaways SA1 and SA2 and is compliant with BRE:365 requiring for three tests to be undertaken within each pit and the lowest result obtained used within the design.*

The contractor confirmed that the tests were undertaken in the locations of the proposed soakaways and that each one was undertaken three times and we were provided with the lowest result.

We trust that all of the above and attached is sufficient to grant approval.

Yours sincerely,

